

Psychometric Properties Of Identity Style Inventory-5 Arabian Version In University Students

Adel Sayed Abbady¹, Ahmed Ali Teleb^{2*}, Asmaa Othman Diab³

Abstract

The formation of self-identity is indeed considered one of the significant challenges faced by teenagers during adolescence. It involves a psychological process marked by internal conflicts that teenagers undergo, leading them to question their sense of self and their position in the world and society. This research aims to translate into Arabic and measure the psychometric characteristics of Identity Style Inventory-5 prepared by Berzonsky, Soenens, Luyckx, Smits, & Papini (2013), The research sample consisted of 271 students (121 males, 150 females) to assess internal consistency and validity of the Arabic version (ISI-5) using Cronbach's α and factor analysis. Results showed good internal consistency and three factors; Thus, the ISI-5 Arabic version is a promising measure of the Identity Style with good psychometric properties.

Keywords: *psychometric properties, identity processing styles, university students.*

1. Introduction

Many changes occur in our modern society in all life, the University students shows these changes in society, as it shows what changes are happening in life, the University students also face successive growth variables, which are largely evident in aspects of their hobby. it is met with the stage of adolescence, which witnesses storms and tensions, and is dominated by psychological suffering, frustration, conflict, anxiety, and difficulties in adaptation (Zahran, 2001). The stage of adolescence is like a second birth in which individuals go through numerous physical, psychological, and emotional changes that impact their lives. During this stage, individuals face many problems related to self-awareness and fluctuations in self-esteem, which in turn influence their perception of themselves and their identity (Longe, 2011, 52-53).

Identity is a widespread concept according to every culture. In general, it refers to the personality as a whole or the personality of an individual or group. It represents compliance with values and goals associated with certain characteristics. There are various forms of identity, including racial or ethnic identity, group identity, social, religious, professional, sexual, sexual role identity, cultural, material, physical, musical, athletic, academic identity and so on.

Among these types, the focus is on ego identity, and adolescence represents the most prominent time for defining identity, as identity represents the process of determining meaning, goals, and the individual's internal orientations. It is the unique essence of the self that maintains some sense of similarity and continuity with one's past, and comfort within the framework of one's current culture (Darity, 2008). The concept of ego identity has been largely linked to the work done by Erikson. The feeling of identity provides the ability to confront the

¹ Department of Psychology, College of Education, King Khalid University, Abha, KSA.

² Department of Psychology, College of Education, King Khalid University, Abha, KSA

³ Department of Educational Psychology, Faculty of Education, The New Valley University, Alkharga, Egypt.

* Correspondence author.

self as something with continuity and similarity and the individual performs behavior accordingly. It represents the individual's determination of who he is, such that the expected future is an extension and continuation of past experiences, or that past experiences are connected to what he expects from the future in a meaningful connection (Morsi, 2002; Hitlin & Lancianese, 2009).

Erikson provided a model of identity development theory, or what is known as psychosocial development theory. His ideas in this theory represent an extension of Freud's thought. However, he disagreed with him in that individuals work actively towards harmony with the environment while facing pressures instead of becoming passive subjects to biological drives. Likewise, the ego is far from being governed by the requirements of the superego and the id, as it represents an interaction with social facts (Shaffer, 2008). As an extension of Erikson's work, Marcia hypothesized that heterogeneity in identity formation occurs during an individual's development, and he attributed this to the process of identity development, which results from two main dimensions: exploration and compliance.

Exploration means the degree to which an individual engages in self-searching about values, beliefs, and goals, and applies what has been discovered to social roles, planning, and beliefs, while compliance refers to a specific adherence to a set of convictions, goals, and values, and according to these two dimensions, Marcia identified four levels of identity: identity realization (high in exploration and compliance), identity suspension (low in compliance, high in exploration), identity closure (high in compliance, low in exploration) and identity dispersion (low in compliance and exploration) (Berzonsky, 2011b, 1364; Busacca, 2003)

The growth and formation of identity is the essence of the development process among adolescents, as differences between them appear in cognitive and social patterns in terms of searching, processing, and memorizing and encoding information. Adolescents who adopt one of these methods can affect their adjustment and integration into society (Crocetti, Erentaitė, & Žukauski, 2014).

Identity styles mean the processes used by an individual to deal with identity conflicts, decisions, and problem solving (Berzonsky, 2011b, 1364). Identity Styles is a processing model that explains how individuals differ in processing and exploring relevant identity information. Identity styles include the informational style, which is the ability to make decisions and solve problems, the normative style, which is based on taking into account the expectations of others when making decisions and solving problems, and the diffuse-avoidant style, which is based on procrastination and avoiding making decisions (Berzonsky, 1990).

Berzonsky's model of identity styles is one of the components of identity, focusing on social-cognitive processes through how people construct, evaluate, and select to build their identity and make decisions about their lives. It focuses on interpersonal differences between individuals in cognitive processing to explore their identity, through three identity styles (Schwartz, Luyckx, & Crocetti, 2014; Soenens & Vansteenkiste, 2011).

The first style is the information identity style: Adolescents in this style spend a lot of time thinking about themselves, actively searching, and evaluating information, are highly suspicious of personal views, and are able to tolerate doubt. They are interested in understanding and learning new things about themselves. They also believe that they play a fundamental role in the nature of their personalities and what they will become in the future, They tend to think rationally about values and ideas that are different from themselves, and they are characterized by their own values, self-knowledge, and self-evaluation (Berzonsky, 2011b, 1364-1365).

The second identity style is the normative identity style: this is the type of individual who directs himself towards dealing with stressful situations through the social standards of others and those who are important in his life when making personal decisions. Thus, they strongly defend their views in the face of contradictory information. They have a predominant cognitive style, and they need social support to confront pressures. The third style is the diffuse-avoidant identity style: individuals are characterized by using methods that focus on feelings such as procrastination, reducing tensions, wishes, and personal choices, focusing on eliminating pressures and negative influences is more important than solving problems. This type fails to reach strong and supported decisions. Instead, they tend to conform to their personal standards according to the demands of the situation (Berzonsky, 2011b; Schwartz, Luyckx, & Crocetti, 2014; Soenens & Vansteenkiste, 2011).

Many studies concluded that identity styles can be a predictor of many behavioral and emotional manifestations. The informational style has been a predictor of a decrease in the tendency towards inertia and the adoption of the idea of the ideal body, high orientation towards self-regulation and responsibility, high self-esteem, and emotional self-regulation, while the avoidant style is a predictor of low orientation toward inertia, healthy eating regulation, self-regulation and responsibility, and a negative predictor of self-esteem and emotional self-regulation. The standard style also represented a predictor of increased tendency towards inertia and self-orientation, increased self-esteem, adoption of the idea of an ideal body, and emotional self-regulation (Duriez, Luyckx, Soenens, & Berzonsky, 2012; Firoozabadi, Bagheri, & Bermas, 2014; Jenaabadi & Dehbashi, 2014; Verstuyf, Petegem, Vansteenkiste, Soenens, & Boone, 2014; Zahed-Babelan, Barghi, & Abolghasemi, 2013).

Some other studies concluded that identity styles can be a predictor of some disorders. Informational style has been a positive predictor of curiosity and proactive coping styles, while the avoidant style is a predictor of communication disorder and hyperactivity. In addition, the informational and normative style positively predict emotional intelligence, while the informational, normative and dispersed style, in addition to congenital intelligence, predict many psychological problems (Physical disorders, anxiety, depression, sleep disturbance, and dysfunction in social functions among female students) (Adams, Munro, Doherty-Poirer, & Edwards, 2001; Faramarzi, Jahanian, Zarbakhsh, Salehi, & Pasha, 2014).

Identity styles explain many psychological problems and disorders through their association directly, or indirectly as a mediating variable (Hejazi, Shahraray, & Farsinej, 2009; Jorgensen, 2009; Phillips & Pittman, 2007; Smits, Doumen, Luyckx, & Durie, 2011). Identity styles affect many positive variables in the individual, either directly or indirectly as a mediating variable (Hejazi, Shahraray, & Farsinej, 2009; Soenens, Duriez, & Goossens, 2005). Identity styles represent a predictor of some problems and disorders such as delinquency (Courey & Pare, 2013), and there are gender differences in identity styles (Imtiaz & Pakistan, 2012). A number of studies also focused on social identity theory as one of the explanations for school bullying (Cassidy, 2009; Gini, 2007; Leach, 2003; Tsang, Hui & Law, 2011).

2. Research Problem

Identity styles represent the framework that provides the adolescent with information about personal relationships and determines the style of solving problems and making decisions. It is the process that governs and organizes the social and cognitive strategies used to build, rebuild, and maintain a sense of personal identity (Berzonsky, 2011a). The problem of the research was defined in the question: "What are the indicators of the psychometric properties of the list of identity processing styles among university students?" and the following questions emanate from it:

- 2.1. Does the scale have internal consistency?

- 2.2. Does the scale have validity?
- 2.3. Does the scale have reliability?

3. Research Objectives

The research aimed to reveal the psychometric properties of the Arab image and a list of identity processing styles in the Arab environment.

4. Research importance

The current research derives its theoretical importance from adding theoretical heritage to the Arab library on the research variables represented in identity styles. The practical importance of the research appears in what the researchers present in discovering the psychometric properties of the Arab image for a list of identity processing styles in the Arab environment.

5. Terminology

Identity styles: Due to the multiplicity of terms and concepts that describe identity and its classification, the researchers in the current research are trying to define it as “identity processing styles”, which are used by individuals to refine their identity, goals and purpose, and values, deal with identity conflicts and decisions, and include the informational, normative, and avoidant-diffuse identity styles and are determined by the score the student obtains on the list of identity styles in this research.

6. Procedures of the research

6.1. Methodology

The researchers in the current research used the descriptive approach.

6.2. Participants

The research included a voluntary sample of 271 male and female students (121 males, 150 females) with an average age of (21.29) and standard deviation (2.39), which was collected using a Google Form link by publishing the link on social media sites. Berzonsky et al. (2013) conducted the reapplication reliability of the list using alpha for the three identity styles, namely the informational identity style, the standard identity style, and the diffuse-avoidant identity style, and they were respectively .82, .78, and .89, and in the grand total of the list it was .74. An exploratory factor analysis of the list of identity styles was also conducted on a sample of 403 male and female students using the principal components method, and it resulted in three main dimensions of the scale on which all statements were saturated. The researchers Arabized the list and presented the translation and foreign version to faculty members specializing in English, psychology and mental health, and Arabic. Some items were modified accordingly and then back-translated back into English-by-English language specialists.

6.3. research Procedures

Translation and Arabization procedures for the Identity Processing Styles Scale:

1. Translating the scale into Arabic and verifying the integrity of the translation by presenting the translated scale into Arabic to a group of English language specialists.
2. Presenting the translation of the scale to Arabic language specialists to verify the integrity of the language.
3. Re-translation of the “translated” Arabic version into English to ensure the accuracy of the translation.

4. Applying the last version of the scale translated into Arabic to the samples.

7. Results

The answer to the first question: “What are the indicators of the psychometric properties of the list of identity processing styles among university students?” To answer the first question, the following steps were taken:

7.1. Calculating the internal consistency of the scale

Correlation coefficients were calculated between each statement and the sum of each dimension of the list of identity processing styles. Correlation coefficients were also calculated between the sum of each dimension and the total score of the scale, as shown in table 1.

Table 1. Correlation coefficients between the score of each statement and the sum of each dimension for the list of identity processing styles

items	Diffuse-avoidant	items	Informational	items	Normative
1	.59**	10	.55**	19	.49**
2	.56**	11	.51**	20	.43**
3	.58**	12	.57**	21	.48**
4	.49**	13	.53**	22	.42**
5	.56**	14	.52**	23	.57**
6	.54**	15	.51**	24	.54**
7	.53**	16	.54**	25	.52**
8	.59**	17	.5**	26	.51**
9	.55**	18	.53**	27	.57**

Note: ** $p < .01$

Table 2. Correlation coefficients for the dimension sum and the total sum for the list of identity processing styles

	Diffuse-avoidant	Informational	Normative
Diffuse-avoidant	-	-.79**	.71**
Informational	-	-	.69**

Note: ** $p < .01$

It is clear from table 2 that all correlation coefficients for each statement and the sum of each dimension of the list of identity processing styles are related to the total score at a level of .01.

7.2. Calculating the validity of the scale

7.2.1. Content validity

The content validity indices were estimated by 9 expert jurors specialized in psychology to evaluate the Arabic version for clarity, relevance, and translation of the contents. The arbitrators agreed on the soundness of the phrases and the accuracy of the translation, and amendments were made to the wording of some of the phrases in the list.

7.2.2. Confirmatory Factorial Validity

The researchers verified the confirmatory validity of the list of identity processing styles using the AMOS.25 program, as shown in figure 1 and table 3.

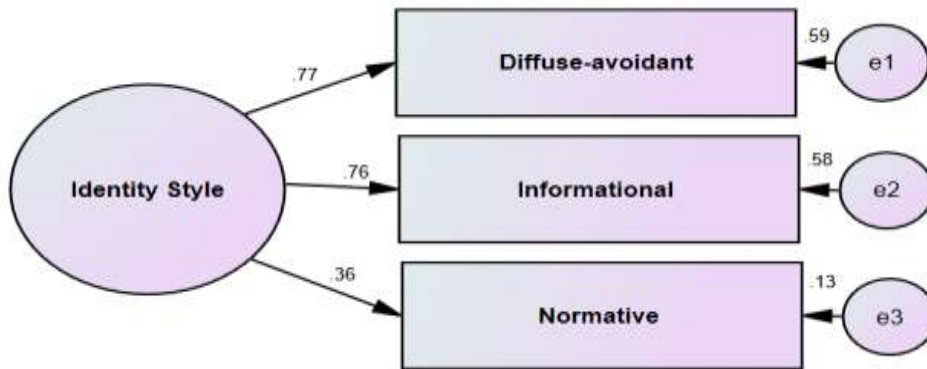


Figure 1. Confirmatory factor analysis for a list of identity processing styles

Table 3. Fit indices and ideal range for the extracted model

Fit indices	Achieved values	Perfect Fit indices
(χ^2/df)	.05	≤ 3
AGFI	.993	$\geq .90$
GFI	.999	$\geq .90$
CFI	.999	$\geq .97$
RMSEA	.01	$\leq .05$
SRMR	.01	$\leq .05$
TLI	.999	$\geq .90$

Figure 1 and table 3 show that the values extracted for the confirmatory factor analysis values of the scale are high, as the value of χ^2 at a degree of freedom (1) is not statistically significant, and this indicates the validity of the scale.

7.3. Calculating the reliability of a list of identity processing styles among university students

7.3.1. Cronbach’s Alpha Reliability

The researchers calculated the alpha reliability of the scale after applying it to the research sample, as shown in table 4.

Table 4. Alpha reliability coefficient for the list of identity processing styles

Variables	Cronbach alphas
Diffuse-avoidant	.81
Informational	.83
Normative	.79
ISI-5	.87

It is clear from table 4 that the Cronbach's Alpha coefficients values for the dimensions and the total score of the list are high.

7.3.2. The Guttman split-half reliability

The split-half reliability was calculated by calculating the correlation coefficient between the two halves of the test.

Table 5. Guttman alpha coefficient for the list of identity processing styles

Variables	Guttman split-half
Diffuse-avoidant	.77
Informational	.72
Normative	.75
ISI-5	.79

Table 5 shows that the values of the Guttman reliability coefficient for the dimensions and the total score of the list are high.

The results of the current research are consistent with previous studies that tested the psychometric efficacy of the scale. The research by Muttaqin (2021), which was applied in Indonesia to test the efficiency of the measure, found that there were good indicators of goodness of fit, as the value of χ^2/df (5.253) and the values of GFI (.966) and CFI (.947) coefficients greater than .9 and RMSEA (.075) coefficients less than .1.

In the research of Monacis et al., (2016), which was applied in Italy, the results showed that there were good indicators of good conformity among university students, with a value of χ^2/df (2.574) and a value of GFI (.966); CFI (.947) and RMSEA (.075). In the study by Skhirtladze et al. (2018), which was applied in Georgia, the results showed that there were good indicators of good adjustment among university students, with a value of χ^2/df (1.684) and a value of RMSEA (.09).

From the above, the scale is valid and stable after its Arabization and is valid for application to young university students, as the psychometric data showed that the Arabic version of the ISI-5 list is a useful tool for verifying identity processing styles.

8. Limits of the research

The research was implemented in the second semester of the academic year 2022 at King Khalid University.

9. Conclusions and Recommendations

Considering the results of the current research, the researchers recommend using a list of identity processing styles (the Arab image) to apply it to the Arab environment among university students after its validity and reliability have been verified in multiple ways in this research.

10. Conflict of interest

The authors declare that there is no conflict regarding the publication of this paper.

Acknowledgment

The authors extend their appreciation to the Deanship of Scientific Research at King Khalid University for funding this work through Large Groups. (Project under grant number RGP.234/44).

References

- Adams, G., Munro, B., Doherty-Poirer, M., & Edwards, J. (2001). Diffuse-avoidance, normative, and informational identity styles: Using identity theory to predict maladjustment. *Identity: An International Journal of Theor*, 1(4), 307–320.
- Berzonsky, M. (1989). Identity style: Conceptualization and measurement. *Journal of Adolescent Research*, 4, 268–282.
- Berzonsky, M. (2008). Identity formation: The role of identity processing style and cognitive processes. *Personality and Individual Differences*, 44, 643–653.
- Berzonsky, M. (2011a). A Social-Cognitive Perspective on Identity Construction. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of Identity Theory and Research* (55-76). New York: Springer.
- Berzonsky, M. (2011b). Identity Processes. In L. J. Roger, *Encyclopedia of Adolescence* (1363-1369). New York: Springer.
- Berzonsky, M. D. (1990). Self-construction over the life-span: A process perspective on identity formation. In G. J. Neimeyer & R. A. Neimeyer (Eds.), *Advances in personal construct psychology* (155–186). Greenwich, CT: JAI Press.
- Berzonsky, M., & Ferrari, R. (2009). A diffuse-avoidant identity processing style: Strategic avoidance or self-confusion? *Identity: An International Journal of Theory and Research*, 9, 145-158.
- Berzonsky, M., Soenens, B., Luyckx, K., Smits, I., & Papini, D. (2013). Development and Validation of the Revised Identity Style Inventory (ISI-5): Factor Structure, Reliability, and Validity. *Psychological Assessment*, 25(3), 893–904.
- Busacca, L. (2003). Identity styles and career development during adolescence. Doctor of Philosophy, Graduate School of Education, Kent State University.
- Cassidy, T. (2009). Bullying and victimization in school children: the role of social identity, problem-solving style, and family and school context. *Social Psychology of Education*, 12(1), 63-76.
- Courey, M., & Pare, P. (2013). A Closer Look at the Relationship between Low Self-Control and Delinquency: The Effects of Identity Styles. *Crime & Delinquency*, In press, 1-29.
- Crocetti, E., Erentaitė, R., & Žukauski, R. (2014). Identity Styles, Positive Youth Development, and Civic Engagement in Adolescence. *Journal of Youth and Adolescence*, 43(11), 1818-1828.
- Darity, W. (2008). *International Encyclopedia of the Social Sciences* (2 ed.). Detroit: Macmillan Reference.
- Duriez, B., Luyckx, K., Soenens, B., & Berzonsky, M. (2012). A Process-Content Approach to Adolescent Identity Formation: Examining Longitudinal Associations Between Identity Styles and Goal Pursuits. *Journal of Personality*, 80(1), 135-161.
- Faramarzi, M., Jahanian, K., ZARBAKHSH, M., Salehi, S., & Pasha, H. (2014). The Role of Moral Intelligence and Identity Styles in Prediction of Mental Health Problems in Healthcare Students. *Health*, 6, 664-672.
- Firoozabadi, A., Bagheri, F., & Bermas, H. (2014). The relationship between identity styles with emotional self-regulation styles and target-based orientation in high school students. *Bull. Env. Pharmacol. Life Sci*, 3, 226-232.

- Gini, G. (2007). Who is blameworthy? Social identity and inter-group bullying. *School Psychology International*, 28(1), 77–89.
- Hejazi, E., Shahraray, M., & Farsinej, M. (2009). Identity styles and academic achievement: mediating role of academic self-efficacy. *Soc Psychol Educ*, 12, 123–135.
- Hitlin, S., & Lancianese, D. (2009). identity Development. In D. Carr, *Encyclopedia of the Life Course and Human Development* (249-252). Detroit: Macmillan.
- Imtiaz, S., & Pakistan, I. (2012). Parental Attachment and Identity Styles among Adolescents: Moderating Role of Gender. *Journal of Psychological Research*, 27(2), 241-264.
- Jenaabadi, H., & Dehbashi, A. (2014). Investigating the Role of Identity Styles in Predicting Responsibility and Academic Self-regulation of Third Grade Male High School Students in Zahedan. *International J. Soc. Sci. & Education*, 4(4), 969-977.
- Jorgensen, C. (2009). identity style in patients with borderline personality disorder and normal controls. *Journal of Personality Disorders*, 23(2), 101-112.
- Leach, F. (2003). Learning to be violent: The role of the school in developing adolescent gendered behaviour. *Compare*, 33, 385–400.
- Longe, J. (2011). *Gale encyclopedia of children's health: infancy through adolescence* (2 ed.). Detroit: Gale.
- Monacis, L., De Palo, V., Sinatra, M., & Berzonsky, M. D. (2016). The revised identity style inventory: Factor structure and validity in Italian speaking students. *Frontiers in psychology*, 7, 883.
- Morsi, Abu Bakr Morsi Muhammad. (2002). Identity crisis in adolescence and the need for psychological guidance. Cairo: Egyptian Nahda Library.
- Muttaqin, D. (2021). Psychometric properties of Identity Style Inventory-5 Indonesian version: Factor structure, reliability, and criterion validity. *Jurnal Psikologi*, 48(1), 23-40.
- Nansel, T., Overpeck, M., Pilla, R., Ruan, J., Simons-Morton, B., & Scheidt, P. (2001). Bullying Behaviors Among US Youth: Prevalence and Association With Psychosocial Adjustment. *JAMA*, 285(16), 2094–2100.
- Phillips, T., & Pittman, J. (2007). Adolescent psychological well-being by identity style. *Journal of Adolescence*, 30, 1021–1034.
- Schwartz, S., Luyckx, K., & Crocetti, E. (2014). What Have We Learned Since Schwartz (2001)? A Reappraisal of the Field of Identity Development. In K. McLean, & M. Syed, *The Oxford Handbook of Identity Development* (539-560). Oxford University Press.
- Shaffer, D. (2008). *Social and Personality Development*. Boston, Massachusetts: Cengage Learning.
- Skhirtladze, N., Javakhishvili, N., Schwartz, S. J., & Luyckx, K. (2018). Identity styles in the Georgian context and associations with parenting dimensions. *European Journal of Developmental Psychology*, 15(1), 24-40.
- Smits, I., Doumen, S., Luyckx, K., & Durie, B. (2011). Identity Styles and Interpersonal Behavior in Emerging Adulthood: The Intervening Role of Empathy. *Social Development*, 20, 664-684.
- Soenens, B., & Vansteenkiste, M. (2011). When Is Identity Congruent with the Self? A Self-Determination Theory Perspective. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles, *Handbook of Identity Theory and Research* (381-402). New York: Springer.
- Soenens, B., Duriez, B., & Goossens, L. (2005). social-cognitive correlates in late adolescence. *Journal of Adolescence*, 28, 107–125.
- Soenens, B., Berzonsky, D., & Vansteenkiste, B. (2005). Identity styles and causality orientations: In search of the motivational underpinnings of the identity exploration process. *European Journal of Personality*, 19, 427–442.
- Tsang, S., Hui, E., & Law, B. (2011). Bystander position taking in school bullying: the role of positive identity, self-efficacy, and self-determination. *the Scientific World Journal*, 11, 2278–2286.

- Verstuyf , J., Petegem, S., Vansteenkiste, M., Soenens, B., & Boone, L. (2014). The Body Perfect Ideal and Eating Regulation Goals: Investigating the Role of Adolescents' Identity Styles. *J Youth Adolescence*, 43, 284–297.
- Zahed-Babelan, A., Barghi, S., & Abolghasemi, A. (2013). Relationship between identity styles and self-esteem. 8, 2294-2297.
- Zahran, Hamed. (2001). *Developmental psychology (childhood and adolescence)*. 5th edition, Cairo: Alam Al Kotob.